

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) A method comprising:
storing packet data including a packet header and a packet body within a storage element, wherein storing packet data includes:
storing said packet body within a common storage element;
storing a copy of said packet header within a unique storage element for each of said plurality of output interfaces; and
associating each of ~~said a~~ plurality of unique storage elements with said common storage element;
maintaining a transmit count value of said storage element, wherein maintaining a transmit count value includes:
initializing said transmit count value by setting said transmit count value of each of said plurality of unique storage elements equal to one less than ~~said a~~ release count value; and
incrementing said transmit count value by one in response to transmitting;
determining a said release count value of said storage element;
transmitting said packet data from said storage element via a plurality of output interfaces;
comparing said transmit count value and said release count value; and
de-allocating said storage element in response to comparing said transmit count value and said release count value.

2. (Original) The method of claim 1, further comprising:

receiving a packet including said packet data; and

allocating said storage element in response to receiving said packet.

3-4. (Canceled)

5. (Previously Presented) The method of claim 1, wherein comparing said transmit count value and said release count value comprises determining whether said incremented transmit count value is equal to said release count value, and de-allocating said storage element in response to comparing said transmit count value and said release count value comprises de-allocating said storage element in response to a determination that said incremented transmit count value is equal to said release count value.

6. (Canceled)

7. (Previously presented) The method of claim 1, wherein transmitting said packet data from said storage element via a plurality of output interfaces comprises transmitting said packet data from said storage element via a plurality of line interfaces.

8. (Original) The method of claim 7, wherein transmitting said packet data from said storage element via a plurality of line interfaces comprises transmitting said packet data from said storage element via a line interface selected from the group consisting of: an Ethernet interface, a Fast Ethernet interface, a Gigabit Ethernet interface, an OC-48/STM-16 interface, an OC-

12/STM-14 interface, an OC-3/STM-1 interface, an IF Video interface, a DWDM interface, a DS-1 interface, a DS-3 interface, an E-1 interface, and an E-3 interface.

9-10. (Canceled)

11-30. (Canceled)

31. (Currently Amended) A machine-readable medium that provides instructions, which when executed by a set of one or more processors, cause said set of processors to perform operations comprising:

storing packet data within a storage element, wherein storing packet data within a storage element includes:

storing said packet body within a common storage element;

storing a copy of said packet header within a unique storage element for each of said a plurality of output interfaces; and

associating each of said plurality of unique storage elements with said common storage element;

maintaining a transmit count value of said storage element, wherein maintaining a transmit count value of said storage element includes:

initializing said transmit count value by setting said transmit count value of each of said plurality of unique storage elements equal to one less than said a release count value; and

incrementing said transmit count value by one in response to transmitting said packet data;

determining a said release count value of said storage element;
transmitting said packet data from said storage element, wherein
transmitting said packet data from said storage element includes:
transmitting said packet data from said storage element via a
plurality of output interfaces;
comparing said transmit count value and said release count value; and
de-allocating said storage element in response to comparing said transmit
count value and said release count value.

32. (Original) The machine-readable medium of claim 31, said operations
further comprising:

receiving a packet including said packet data; and
allocating said storage element in response to receiving said packet.

33-34. (Canceled)

35. (Previously Presented) The machine-readable medium of claim 31,
wherein comparing said transmit count value and said release count value
comprises determining whether said incremented transmit count value is equal to
said release count value, and de-allocating said storage element in response to
comparing said transmit count value and said release count value comprises de-
allocating said storage element in response to a determination that said
incremented transmit count value is equal to said release count value.

36. (Canceled)

37. (Previously Presented) The machine-readable medium of claim 31, wherein transmitting said packet data from said storage element via a plurality of output interfaces comprises transmitting said packet data from said storage element via a plurality of line interfaces.

38. (Original) The machine-readable medium of claim 37, wherein transmitting said packet data from said storage element via a plurality of line interfaces comprises transmitting said packet data from said storage element via a line interface selected from the group consisting of: an Ethernet interface, a Fast Ethernet interface, a Gigabit Ethernet interface, an OC-48/STM-16 interface, an OC-12/STM-14 interface, an OC-3/STM-1 interface, an IF Video Interface, a DWDM interface, a DS-1 interface, a DS-3 interface, an E-1 interface, and an E-3 interface.

39-40. (Canceled)

41. (Currently Amended) A method comprising:

storing a plurality of packet data within a plurality of storage elements,
each one of said plurality of packet data including a packet header and a packet body, wherein storing said plurality of packet data within a storage element comprises:

storing said packet body within a common storage element;

storing a copy of said packet header within a unique storage element for each of said plurality of output interfaces; and

associating each of a plurality of unique storage elements with said common storage element;

maintaining a transmit count value of each one of said plurality of storage elements stored within each one of said plurality of storage elements storing a plurality of packet data, wherein maintaining said transmit count value of said plurality of storage element comprises:

initializing said transmit count value, wherein initializing said transmit count value comprises setting said transmit count value of each of said plurality of unique storage elements equal to one less than a release count value; and

incrementing said transmit count value by one in response to transmitting one of said plurality of packet data;

determining a said release count value of each one of said plurality of storage elements;

transmitting each one of said plurality of packet data from said plurality of storage elements, wherein transmitting each one of said plurality of packet data from said plurality of storage elements comprises transmitting each one of said plurality of packet data from one of said plurality of storage elements via a plurality of output interfaces;

comparing said transmit count value and said release count value for each one of said plurality of storage elements; and

de-allocating each one of said plurality of storage elements in response to comparing said transmit count value and said release count value.

42-46. (Canceled)

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